

- (b) a protein consisting of amino acid residues 1 to 242 of SEQ ID NO:2;
- (c) a protein consisting of amino acid residues 4 to 63 of SEQ ID NO:2;
- (d) a protein consisting of amino acid residues 64 to 242 of SEQ ID NO:2;
- (e) a protein consisting of a portion of SEQ ID NO:2, wherein said portion comprises at least 30 contiguous amino acid residues of SEQ ID NO:2; and
- (f) a protein consisting of a portion of SEQ ID NO:2, wherein said portion comprises at least 50 contiguous amino acid residues of SEQ ID NO:2.

22. (New) The antibody or fragment thereof of claim 21 that specifically binds protein (a).

23. (New) The antibody or fragment thereof of claim 21 that specifically binds protein (b).

24. (New) The antibody or fragment thereof of claim 21 that specifically binds protein (c).

25. (New) The antibody or fragment thereof of claim 21 that specifically binds protein (d).

26. (New) The antibody or fragment thereof of claim 21 that specifically binds protein (e).

27. (New) The antibody or fragment thereof of claim 21 that specifically binds protein (f).

28. (New) The antibody or fragment thereof of claim 23 that specifically binds protein (c).

29. (New) The antibody or fragment thereof of claim 23 wherein said protein bound by said antibody or fragment thereof is glycosylated.

30. (New) The antibody or fragment thereof of claim 23 which is a human antibody.

31. (New) The antibody or fragment thereof of claim 23 which is a polyclonal antibody.

32. (New) The antibody or fragment thereof of claim 23 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a humanized antibody;
- (c) a single chain antibody; and
- (d) a Fab fragment.

33. (New) The antibody or fragment thereof of claim 23 which is labeled.

34. (New) The antibody or fragment thereof of claim 33 wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a fluorescent label;
- (c) a luminescent label; and
- (d) a bioluminescent label.

35. (New) The antibody or fragment thereof of claim 33 wherein the label is a radioisotope.

36. (New) The antibody or fragment thereof of claim 35 wherein the radioisotope is selected from the group consisting of:

- (a) ^{125}I ;
- (b) ^{121}I ;
- (c) ^{14}C ;

(d) ^{35}S ;

(e) ^3H ;

(f) ^{111}In ; and

(g) $^{99\text{m}}\text{Tc}$.

37. (New) The antibody or fragment thereof of claim 33 wherein the label is biotin.

38. (New) The antibody or fragment thereof of claim 23 wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

39. (New) The antibody or fragment thereof of claim 23 wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.

40. (New) The antibody or fragment thereof of claim 23, wherein the antibody or fragment thereof enhances t-PALP biological activity.

41. (New) The antibody or portion thereof of claim 23 which is fused to a heterologous polypeptide.

42. (New) The antibody of claim 23 which is attached to a solid support.

43. (New) An isolated cell that produces the antibody or fragment thereof of claim 23.

44. (New) A hybridoma that produces the antibody or fragment thereof of claim 23.

45. (New) A method of detecting a protein in a biological sample comprising:

(a) contacting the biological sample with the antibody or fragment thereof of claim 23; and

(b) detecting the protein in the biological sample.

46. (New) The method of claim 45 wherein the antibody or fragment thereof is a polyclonal antibody.

47. (New) An isolated antibody or fragment thereof obtained from an animal that has been immunized with a protein selected from the group consisting of:

- (a) a protein consisting of amino acid residues -20 to 242 of SEQ ID NO:2;
- (b) a protein consisting of amino acid residues 1 to 242 of SEQ ID NO:2;
- (c) a protein consisting of amino acid residues 4 to 63 of SEQ ID NO:2;
- (d) a protein consisting of amino acid residues 64 to 242 of SEQ ID NO:2;
- (e) a protein consisting of a portion of SEQ ID NO:2, wherein said portion comprises at least 30 contiguous amino acid residues of SEQ ID NO:2; and
- (f) a protein consisting of a portion of SEQ ID NO:2, wherein said portion comprises at least 50 contiguous amino acid residues of SEQ ID NO:2;

wherein said antibody or fragment thereof specifically binds to said amino acid sequence.

48. (New) The antibody or fragment thereof of claim 47 obtained from an animal immunized with protein (a).

49. (New) The antibody or fragment thereof of claim 47 obtained from an animal immunized with protein (b).

50. (New) The antibody or fragment thereof of claim 47 obtained from an animal immunized with protein (c).

51. (New) The antibody or fragment thereof of claim 47 obtained from an animal immunized with protein (d).

52. (New) The antibody or fragment thereof of claim 47 obtained from an animal immunized with protein (e).

a!
cont

53. (New) The antibody or fragment thereof of claim 47 obtained from an animal immunized with protein (f).

54. (New) The antibody or fragment thereof of claim 47 which is a monoclonal antibody.

55. (New) The antibody or fragment thereof of claim 47 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a polyclonal antibody;
- (c) a humanized antibody;
- (d) a single chain antibody; and
- (e) a Fab fragment.

56. (New) An isolated monoclonal antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:

- (a) a protein consisting of amino acid residues -20 to 242 of SEQ ID NO:2;
- (b) a protein consisting of amino acid residues 1 to 242 of SEQ ID NO:2;
- (c) a protein consisting of amino acid residues 4 to 63 of SEQ ID NO:2;
- (d) a protein consisting of amino acid residues 64 to 242 of SEQ ID NO:2;
- (e) a protein consisting of a portion of SEQ ID NO:2, wherein said portion

comprises at least 30 contiguous amino acid residues of SEQ ID NO:2; and

(f) a protein consisting of a portion of SEQ ID NO:2, wherein said portion comprises at least 50 contiguous amino acid residues of SEQ ID NO:2.

57. (New) The antibody or fragment thereof of claim 56 that specifically binds protein (a).

58. (New) The antibody or fragment thereof of claim 56 that specifically binds protein (b).

59. (New) The antibody or fragment thereof of claim 56 that specifically binds protein (c).

60. (New) The antibody or fragment thereof of claim 56 that specifically binds protein (d).

61. (New) The antibody or fragment thereof of claim 56 that specifically binds protein (e).

62. (New) The antibody or fragment thereof of claim 56 that specifically binds protein (f).

63. (New) The antibody or fragment thereof of claim 58 that specifically binds protein (c).

64. (New) The antibody or fragment thereof of claim 58 wherein said protein bound by said antibody or fragment thereof is glycosylated.

65. (New) The antibody or fragment thereof of claim 58 which is a human antibody.

66. (New) The antibody or fragment thereof of claim 58 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a humanized antibody;
- (c) a single chain antibody; and
- (d) a Fab fragment.

67. (New) The antibody or fragment thereof of claim 58 which is labeled.

68. (New) The antibody or fragment thereof of claim 67 wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a fluorescent label;
- (c) a luminescent label; and
- (d) a bioluminescent label.

69. (New) The antibody or fragment thereof of claim 67 wherein the label is a radioisotope.

70. (New) The antibody or fragment thereof of claim 69 wherein the radioisotope is selected from the group consisting of:

- (a) ^{125}I ;
- (b) ^{121}I ;
- (c) ^{14}C ;
- (d) ^{35}S ;
- (e) ^3H ;
- (f) ^{111}In ; and
- (g) $^{99\text{m}}\text{Tc}$.

71. (New) The antibody or fragment thereof of claim 67 wherein the label is biotin.

72. (New) The antibody or fragment thereof of claim 58 wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

73. (New) The antibody or fragment thereof of claim 58 wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.

a!
cont

74. (New) The isolated antibody or fragment thereof of claim 58, wherein the antibody or fragment thereof enhances t-PALP biological activity.

75. (New) The antibody or portion thereof of claim 58 which is fused to a heterologous polypeptide.

76. (New) The antibody of claim 58 which is attached to a solid support.

77. (New) An isolated cell that produces the antibody or fragment thereof of claim 58.

78. (New) A hybridoma that produces the antibody or fragment thereof of claim 58.

79. (New) A method of detecting a protein in a biological sample comprising:

(a) contacting the biological sample with the antibody or fragment thereof of claim 58; and

(b) detecting the protein in the biological sample.

80. (New) An isolated antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:

(a) a protein consisting of the full-length polypeptide excepting the N-terminal methionine encoded by the cDNA contained in ATCC Deposit Number 209023;

(b) a protein consisting of the mature form of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023;

(c) a protein consisting of the kringle domain of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023;

(d) a protein consisting of the protease domain of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023;

(e) a protein consisting of a portion of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023, wherein said portion comprises at least 30 contiguous amino acid residues of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023; and

(f) a protein consisting of a portion of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023, wherein said portion comprises at least 50 contiguous amino acid residues of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023.

81. (New) The antibody or fragment thereof of claim 80 that specifically binds protein (a).

82. (New) The antibody or fragment thereof of claim 80 that specifically binds protein (b).

83. (New) The antibody or fragment thereof of claim 80 that specifically binds protein (c).

84. (New) The antibody or fragment thereof of claim 80 that specifically binds protein (d).

85. (New) The antibody or fragment thereof of claim 80 that specifically binds protein (e).

86. (New) The antibody or fragment thereof of claim 80 that specifically binds protein (f).

87. (New) The antibody or fragment thereof of claim 82 that specifically binds protein (c).

88. (New) The antibody or fragment thereof of claim 82 wherein said protein bound by said antibody or fragment thereof is glycosylated.

89. (New) The antibody or fragment thereof of claim 82 which is a human antibody.

90. (New) The antibody or fragment thereof of claim 82 which is a polyclonal antibody.

91. (New) The antibody or fragment thereof of claim 82 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a humanized antibody;
- (c) a single chain antibody; and
- (d) a Fab fragment.

92. (New) The antibody or fragment thereof of claim 82 which is labeled.

93. (New) The antibody or fragment thereof of claim 92 wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a fluorescent label;
- (c) a luminescent label; and
- (d) a bioluminescent label.

94. (New) The antibody or fragment thereof of claim 92 wherein the label is a radioisotope.

95. (New) The antibody or fragment thereof of claim 94 wherein the radioisotope is selected from the group consisting of:

- (a) ^{125}I ;
- (b) ^{121}I ;
- (c) ^{14}C ;

a!
cont

- (d) ^{35}S ;
- (e) ^3H ;
- (f) ^{111}In ; and
- (g) $^{99\text{m}}\text{Tc}$.

96. (New) The antibody or fragment thereof of claim 92 wherein the label is biotin.
97. (New) The antibody or fragment thereof of claim 82 wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.
98. (New) The antibody or fragment thereof of claim 82 wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.
99. (New) The isolated antibody or fragment thereof of claim 82, wherein the antibody or fragment thereof enhances t-PALP biological activity.
100. (New) The antibody or portion thereof of claim 82 which is fused to a heterologous polypeptide.
101. (New) The antibody of claim 82 which is attached to a solid support.
102. (New) An isolated cell that produces the antibody or fragment thereof of claim 82.
103. (New) A hybridoma that produces the antibody or fragment thereof of claim 82.
104. (New) A method of detecting a protein in a biological sample comprising:
- (a) contacting the biological sample with the antibody or fragment thereof of claim 82; and
 - (b) detecting the protein in the biological sample.

105. (New) The method of claim 104 wherein the antibody or fragment thereof is a polyclonal antibody.

106. (New) An isolated antibody or fragment thereof obtained from an animal that has been immunized with a protein selected from the group consisting of:

(a) a protein consisting of the full-length polypeptide excepting the N-terminal methionine encoded by the cDNA contained in ATCC Deposit Number 209023;

(b) a protein consisting of the mature form of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023;

(c) a protein consisting of the kringle domain of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023;

(d) a protein consisting of the protease domain of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023;

(e) a protein consisting of a portion of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023, wherein said portion comprises at least 30 contiguous amino acid residues of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023; and

(f) a protein consisting of a portion of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023, wherein said portion comprises at least 50 contiguous amino acid residues of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023;

wherein said antibody or fragment thereof specifically binds to said amino acid sequence.

107. (New) The antibody or fragment thereof of claim 106 obtained from an animal immunized with protein (a).

a!
cont

108. (New) The antibody or fragment thereof of claim 106 obtained from an animal immunized with protein (b).

109. (New) The antibody or fragment thereof of claim 106 obtained from an animal immunized with protein (c).

110. (New) The antibody or fragment thereof of claim 106 obtained from an animal immunized with protein (d).

111. (New) The antibody or fragment thereof of claim 106 obtained from an animal immunized with protein (e).

112. (New) The antibody or fragment thereof of claim 106 obtained from an animal immunized with protein (f).

113. (New) The antibody or fragment thereof of claim 106 which is a monoclonal antibody.

114. (New) The antibody or fragment thereof of claim 106 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a polyclonal antibody;
- (c) a humanized antibody;
- (d) a single chain antibody; and
- (e) a Fab fragment.

115. (New) An isolated monoclonal antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:

- (a) a protein consisting of the full-length polypeptide excepting the N-terminal methionine encoded by the cDNA contained in ATCC Deposit Number 209023;

(b) a protein consisting of the mature form of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023;

(c) a protein consisting of the kringle domain of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023;

(d) a protein consisting of the protease domain of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023;

(e) a protein consisting of a portion of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023, wherein said portion comprises at least 30 contiguous amino acid residues of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023; and

(f) a protein consisting of a portion of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023, wherein said portion comprises at least 50 contiguous amino acid residues of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209023.

a¹
Cont.
116. (New) The antibody or fragment thereof of claim 115 that specifically binds protein (a).

117. (New) The antibody or fragment thereof of claim 115 that specifically binds protein (b).

118. (New) The antibody or fragment thereof of claim 115 that specifically binds protein (c).

119. (New) The antibody or fragment thereof of claim 115 that specifically binds protein (d).

120. (New) The antibody or fragment thereof of claim 115 that specifically binds protein (e).

121. (New) The antibody or fragment thereof of claim 115 that specifically binds protein (f).

122. (New) The antibody or fragment thereof of claim 117 that specifically binds protein (b).

123. (New) The antibody or fragment thereof of claim 117 wherein said protein bound by said antibody or fragment thereof is glycosylated.

124. (New) The antibody or fragment thereof of claim 117 which is a human antibody.

125. (New) The antibody or fragment thereof of claim 117 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a humanized antibody;
- (c) a single chain antibody; and
- (d) a Fab fragment.

126. (New) The antibody or fragment thereof of claim 117 which is labeled.

127. (New) The antibody or fragment thereof of claim 126 wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a fluorescent label;
- (c) a luminescent label; and
- (d) a bioluminescent label.

128. (New) The antibody or fragment thereof of claim 126 wherein the label is a radioisotope.

129. (New) The antibody or fragment thereof of claim 128 wherein the radioisotope is selected from the group consisting of:

- (a) ^{125}I ;
- (b) ^{121}I ;
- (c) ^{14}C ;
- (d) ^{35}S ;
- (e) ^3H ;
- (f) ^{111}In ; and
- (g) $^{99\text{m}}\text{Tc}$.

130. (New) The antibody or fragment thereof of claim 126 wherein the label is biotin.

131. (New) The antibody or fragment thereof of claim 117 wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

132. (New) The antibody or fragment thereof of claim 117 wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.

133. (New) The isolated antibody or fragment thereof of claim 117, wherein the antibody or fragment thereof enhances t-PALP biological activity.

134. (New) The antibody or portion thereof of claim 117 which is fused to a heterologous polypeptide.

135. (New) The antibody of claim 117 which is attached to a solid support.

136. (New) An isolated cell that produces the antibody or fragment thereof of claim 117.

137. (New) A hybridoma that produces the antibody or fragment thereof of claim 117.

a!
cont

138. (New) A method of detecting a protein in a biological sample comprising:
(a) contacting the biological sample with the antibody or fragment thereof of claim 117; and

(b) detecting the protein in the biological sample.

139. (New) An isolated antibody or fragment thereof that specifically binds a protein purified from a cell culture wherein the cells in said cell culture comprise a polynucleotide encoding amino acids 1 to 242 of SEQ ID NO:2 operably associated with a regulatory sequence that controls the expression of said polynucleotide.

140. (New) The antibody or fragment thereof of claim 139 which is a monoclonal antibody.

141. (New) The antibody or fragment thereof of claim 139 which is a human antibody.

142. (New) The antibody or fragment thereof of claim 139 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a polyclonal antibody;
- (c) a humanized antibody;
- (d) a single chain antibody; and
- (e) a Fab fragment.

143. (New) The antibody or fragment thereof of claim 139 wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

144. (New) The antibody or fragment thereof of claim 139 wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.

a!
cont

145. (New) An isolated antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:

- (a) a protein consisting of amino acid residues 1 to 10 of SEQ ID NO:2;
- (b) a protein consisting of amino acid residues 14 to 23 of SEQ ID NO:2;
- (c) a protein consisting of amino acid residues 50 to 60 of SEQ ID NO:2;
- (d) a protein consisting of amino acid residues 70 to 86 of SEQ ID NO:2;
- (e) a protein consisting of amino acid residues 98 to 107 of SEQ ID NO:2;
- (f) a protein consisting of amino acid residues 117 to 126 of SEQ ID NO:2;
- (g) a protein consisting of amino acid residues 134 to 146 of SEQ ID NO:2;
- (h) a protein consisting of amino acid residues 172 to 182 of SEQ ID NO:2;
- (i) a protein consisting of amino acid residues 185 to 194 of SEQ ID NO:2;
- (j) a protein consisting of amino acid residues 206 to 216 of SEQ ID NO:2;

and

- (k) a protein consisting of amino acid residues 222 to 231 of SEQ ID NO:2.

146. (New) The antibody or fragment thereof of claim 145 that specifically binds protein (a).

147. (New) The antibody or fragment thereof of claim 145 that specifically binds protein (b).

148. (New) The antibody or fragment thereof of claim 145 that specifically binds protein (c).

149. (New) The antibody or fragment thereof of claim 145 that specifically binds protein (d).

150. (New) The antibody or fragment thereof of claim 145 that specifically binds protein (e).

151. (New) The antibody or fragment thereof of claim 145 that specifically binds protein (f).

152. (New) The antibody or fragment thereof of claim 145 that specifically binds protein (g).

153. (New) The antibody or fragment thereof of claim 145 that specifically binds protein (h).

154. (New) The antibody or fragment thereof of claim 145 that specifically binds protein (i).

155. (New) The antibody or fragment thereof of claim 145 that specifically binds protein (j).

156. (New) The antibody or fragment thereof of claim 145 that specifically binds protein (k).

157. (New) The antibody or fragment thereof of claim 145 wherein said protein bound by said antibody or fragment thereof is glycosylated.

158. (New) The antibody or fragment thereof of claim 145 which is a human antibody.

159. (New) The antibody or fragment thereof of claim 145 which is a polyclonal antibody.

160. (New) The antibody or fragment thereof of claim 145 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a humanized antibody;
- (c) a single chain antibody; and
- (d) a Fab fragment.

161. (New) The antibody or fragment thereof of claim 145 which is labeled.

162. (New) The antibody or fragment thereof of claim 161 wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a fluorescent label;
- (c) a luminescent label; and
- (d) a bioluminescent label.

163. (New) The antibody or fragment thereof of claim 161 wherein the label is a radioisotope.

164. (New) The antibody or fragment thereof of claim 163 wherein the radioisotope is selected from the group consisting of:

- (a) ^{125}I ;
- (b) ^{121}I ;
- (c) ^{14}C ;
- (d) ^{35}S ;
- (e) ^3H ;
- (f) ^{111}In ; and
- (g) $^{99\text{m}}\text{Tc}$.

165. (New) The antibody or fragment thereof of claim 161 wherein the label is biotin.

166. (New) The antibody or fragment thereof of claim 145 wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

167. (New) The antibody or fragment thereof of claim 145 wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.

a!
cont

168. (New) An isolated antibody or fragment thereof that binds a protein consisting of amino acid residues 1 to 242 of SEQ ID NO:2 with a dissociation constant (K_D) less than or equal to 10^{-8} M.

169. (New) The isolated antibody or fragment thereof of claim 168, wherein the isolated antibody or fragment thereof has a dissociation constant (K_D) less than or equal to 10^{-9} M.

170. (New) The isolated antibody or fragment thereof of claim 168, wherein the isolated antibody or fragment thereof has a dissociation constant (K_D) less than or equal to 10^{-10} M.

171. (New) The isolated antibody or fragment thereof of claim 168, wherein the isolated antibody or fragment thereof has a dissociation constant (K_D) less than or equal to 10^{-11} M.

172. (New) The isolated antibody or fragment thereof of claim 168, wherein the isolated antibody or fragment thereof has a dissociation constant (K_D) less than or equal to 10^{-12} M.

a¹
cont
173. (New) The antibody or fragment thereof of claim 168 wherein said protein bound by said antibody or fragment thereof is glycosylated.

174. (New) The antibody or fragment thereof of claim 168 which is a human antibody.

175. (New) The antibody or fragment thereof of claim 168 which is a polyclonal antibody.

176. (New) The antibody or fragment thereof of claim 168 which is selected from the group consisting of:

(a) a chimeric antibody;

- (b) a humanized antibody;
- (c) a single chain antibody; and
- (d) a Fab fragment.

177. (New) The antibody or fragment thereof of claim 168 which is labeled.

178. (New) The antibody or fragment thereof of claim 177 wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a fluorescent label;
- (c) a luminescent label; and
- (d) a bioluminescent label.

179. (New) The antibody or fragment thereof of claim 177 wherein the label is a radioisotope.

180. (New) The antibody or fragment thereof of claim 179 wherein the radioisotope is selected from the group consisting of:

- (a) ^{125}I ;
- (b) ^{121}I ;
- (c) ^{14}C ;
- (d) ^{35}S ;
- (e) ^3H ;
- (f) ^{111}In ; and
- (g) $^{99\text{m}}\text{Tc}$.

181. (New) The antibody or fragment thereof of claim 177 wherein the label is biotin.

a!
cont

182. (New) The antibody or fragment thereof of claim 168 wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

a¹

183. (New) The antibody or fragment thereof of claim 168 wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.
